

WO 00/01821

PCT/US99/15121

SEQUENCE LISTING

<110> INCYTE PHARMACEUTICALS, INC.

LAL, Preeti
 TANG, Y. Tom
 YUE, Henry
 CORLEY, Neil C.
 GUEGLER, Karl J.
 GORGONE, Gina A.
 BAUGHN, Mariah R.
 PATTERSON, Chandra

<120> NEUROTRANSMISSION ASSOCIATED PROTEINS

<130> PF-0551 PCT

<140> To Be Assigned

<141> Herewith

<150> 60/091,667

<151> 1998-07-02

<160> 12

<170> PERL Program

<210> 1

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 238506

<400> 1

Leu	Leu	Lys	Pro	Gly	Leu	Arg	Ala	Val	Val	Gly	Gly	Ala	Ala	Ala					
1				5					10					15					
Val	Ser	Thr	Gln	Ala	Met	His	Asn	Gly	Ser	Pro	Lys	Ser	Ser	Ala					
				20					25					30					
Ser	Gln	Ala	Gly	Ala	Ala	Ala	Gly	Gln	Gly	Ala	Pro	Ala	Pro	Ala					
				35					40					45					
Pro	Ala	Ser	Gln	Glu	Pro	Leu	Pro	Ile	Ala	Gly	Pro	Ala	Thr	Ala					
				50					55					60					
Pro	Ala	Pro	Arg	Pro	Leu	Gly	Ser	Ile	Gln	Arg	Pro	Asn	Ser	Phe					
				65					70					75					
Leu	Phe	Arg	Ser	Ser	Ser	Gln	Ser	Gly	Ser	Gly	Pro	Ser	Ser	Pro					
				80					85					90					
Asp	Ser	Val	Leu	Arg	Pro	Arg	Arg	Tyr	Pro	Gln	Val	Pro	Asp	Glu					
				95					100					105					
Lys	Asp	Leu	Met	Thr	Gln	Leu	Arg	Gln	Val	Leu	Glu	Ser	Arg	Leu					
				110					115					120					
Gln	Arg	Pro	Leu	Pro	Glu	Asp	Leu	Ala	Glu	Ala	Leu	Ala	Ser	Gly					
				125					130					135					
Val	Ile	Leu	Cys	Gln	Leu	Ala	Asn	Gln	Leu	Arg	Pro	Arg	Ser	Val					
				140					145					150					

WO 00/01821

PCT/US99/15121

Pro	Phe	Ile	His	Val	Pro	Ser	Pro	Ala	Val	Pro	Lys	Leu	Ser	Ala
				155					160					165
Leu	Lys	Ala	Arg	Lys	Asn	Val	Glu	Ser	Phe	Leu	Glu	Ala	Cys	Arg
				170					175					180
Lys	Met	Gly	Val	Pro	Glu	Ala	Asp	Leu	Cys	Ser	Pro	Ser	Asp	Leu
				185					190					195
Leu	Gln	Gly	Thr	Ala	Arg	Gly	Leu	Arg	Thr	Ala	Leu	Glu	Ala	Val
				200					205					210
Lys	Arg	Val	Gly	Gly	Lys	Ala	Leu	Pro	Pro	Leu	Trp	Pro	Pro	Ser
				215					220					225
Gly	Leu	Gly	Gly	Phe	Val	Val	Phe	Tyr	Val	Val	Leu	Met	Leu	Leu
				230					235					240
Leu	Tyr	Val	Thr	Tyr	Thr	Arg	Leu	Leu	Gly	Ser				
				245					250					

<210> 2
 <211> 238
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte Clone No: 414692

<400> 2

Met	Ala	Asp	Pro	Asp	Pro	Arg	Tyr	Pro	Arg	Ser	Ser	Ile	Glu	Asp
1				5					10					15
Asp	Phe	Asn	Tyr	Gly	Ser	Ser	Val	Ala	Ser	Ala	Thr	Val	His	Ile
				20					25					30
Arg	Met	Ala	Phe	Leu	Arg	Lys	Val	Tyr	Ser	Ile	Leu	Ser	Leu	Gln
				35					40					45
Val	Leu	Leu	Thr	Thr	Val	Thr	Ser	Thr	Val	Phe	Leu	Tyr	Phe	Glu
				50					55					60
Ser	Val	Arg	Thr	Phe	Val	His	Glu	Ser	Pro	Ala	Leu	Ile	Leu	Leu
				65					70					75
Phe	Ala	Leu	Gly	Ser	Leu	Gly	Leu	Ile	Phe	Ala	Leu	Thr	Leu	Asn
				80					85					90
Arg	His	Lys	Tyr	Pro	Leu	Asn	Leu	Tyr	Leu	Leu	Phe	Gly	Phe	Thr
				95					100					105
Leu	Leu	Glu	Ala	Leu	Thr	Val	Ala	Val	Val	Val	Thr	Phe	Tyr	Asp
				110					115					120
Val	Tyr	Ile	Ile	Leu	Gln	Ala	Phe	Ile	Leu	Thr	Thr	Thr	Val	Phe
				125					130					135
Phe	Gly	Leu	Thr	Val	Tyr	Thr	Leu	Gln	Ser	Lys	Lys	Asp	Phe	Ser
				140					145					150
Lys	Phe	Gly	Ala	Gly	Leu	Phe	Ala	Leu	Leu	Trp	Ile	Leu	Cys	Leu
				155					160					165
Ser	Gly	Phe	Leu	Lys	Phe	Phe	Phe	Tyr	Ser	Glu	Ile	Met	Glu	Leu
				170					175					180
Val	Leu	Ala	Ala	Ala	Gly	Ala	Leu	Leu	Phe	Cys	Gly	Phe	Ile	Ile
				185					190					195
Tyr	Asp	Thr	His	Ser	Leu	Met	His	Lys	Leu	Ser	Pro	Glu	Glu	Tyr
				200					205					210
Val	Leu	Ala	Ala	Ile	Ser	Leu	Tyr	Leu	Asp	Ile	Ile	Asn	Leu	Phe

WO 00/01821

PCT/US99/15121

	215		220		225
Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys					
	230		235		

<210> 3
 <211> 408
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte Clone No: 998868

<400> 3
 Met Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe
 1 5 10 15
 Asp Val Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly
 20 25 30
 Asn Met Ser Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu
 35 40 45
 Asn Arg Cys Cys His Leu Phe Ser Thr Tyr Val Ala Ser His Lys
 50 55 60
 Ile Glu Lys Glu Glu Gln Asp Lys Lys Arg Gln Glu Glu Glu Glu
 65 70 75
 Arg Arg Arg Arg Glu Glu Glu Glu Arg Glu Arg Leu Pro Lys Glu
 80 85 90
 Glu Glu Lys Arg Arg Arg Glu Glu Glu Glu Arg Leu Arg Arg Ala
 95 100 105
 Ala Glu Glu Arg Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu
 110 115 120
 Gln Gln Lys Gln Gln Ile Met Ala Ala Leu Asn Ser Gln Thr Ala
 125 130 135
 Val Gln Phe Gln Gln Tyr Ala Ala Gln Gln Tyr Pro Gly Asn Tyr
 140 145 150
 Glu Gln Gln Gln Ile Leu Ile Arg Gln Leu Gln Glu Gln His Tyr
 155 160 165
 Gln Gln Tyr Met Gln Gln Leu Tyr Gln Val Gln Leu Ala Gln Gln
 170 175 180
 Gln Ala Ala Leu Gln Lys Gln Gln Glu Val Val Val Ala Gly Ser
 185 190 195
 Ser Leu Pro Thr Ser Ser Lys Val Asn Ala Thr Val Pro Ser Asn
 200 205 210
 Met Met Ser Val Asn Gly Gln Ala Lys Thr His Thr Asp Ser Ser
 215 220 225
 Glu Lys Glu Leu Glu Pro Glu Ala Ala Glu Glu Ala Leu Glu Asn
 230 235 240
 Gly Pro Lys Glu Ser Leu Pro Val Ile Ala Ala Pro Ser Met Trp
 245 250 255
 Thr Arg Pro Gln Ile Lys Asp Phe Lys Glu Lys Ile Gln Gln Asp
 260 265 270
 Ala Asp Ser Val Ile Thr Val Gly Arg Gly Glu Val Val Thr Val
 275 280 285
 Arg Val Pro Thr His Glu Glu Gly Ser Tyr Leu Phe Trp Glu Phe
 290 295 300

WO 00/01821

PCT/US99/15121

Ala Thr Asp Asn Tyr Asp Ile Gly Phe Gly Val Tyr Phe Glu Trp		
	305	310 315
Thr Asp Ser Pro Asn Thr Ala Val Ser Val His Val Ser Glu Ser	320	325 330
Ser Asp Asp Asp Glu Glu Glu Glu Glu Asn Ile Gly Cys Glu Glu	335	340 345
Lys Ala Lys Lys Asn Ala Asn Lys Pro Leu Leu Asp Glu Ile Val	350	355 360
Pro Val Tyr Arg Arg Asp Cys His Glu Glu Val Tyr Ala Gly Ser	365	370 375
His Gln Tyr Pro Gly Arg Gly Val Tyr Leu Leu Lys Phe Asp Asn	380	385 390
Ser Tyr Ser Leu Trp Arg Ser Lys Ser Val Tyr Tyr Arg Val Tyr	395	400 405
Tyr Thr Arg		

<210> 4

<211> 272

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 1296451

<400> 4

Met Thr Ala Thr Glu Ala Leu Leu Arg Val Leu Leu Leu Leu Leu		
1	5	10 15
Ala Phe Gly His Ser Thr Tyr Gly Ala Glu Cys Phe Pro Ala Cys	20	25 30
Asn Pro Gln Asn Gly Phe Cys Glu Asp Asp Asn Val Cys Arg Cys	35	40 45
Gln Pro Gly Trp Gln Gly Pro Leu Cys Asp Gln Cys Val Thr Ser	50	55 60
Pro Gly Cys Leu His Gly Leu Cys Gly Glu Pro Gly Gln Cys Ile	65	70 75
Cys Thr Asp Gly Trp Asp Gly Glu Leu Cys Asp Arg Asp Val Arg	80	85 90
Ala Cys Ser Ser Ala Pro Cys Ala Asn Asn Gly Tyr Ser Gly Lys	95	100 105
Asp Cys Gln Lys Lys Asp Gly Pro Cys Val Ile Asn Gly Ser Pro	110	115 120
Cys Gln His Gly Gly Thr Cys Val Asp Asp Glu Gly Arg Ala Ser	125	130 135
His Ala Ser Cys Leu Cys Pro Pro Gly Phe Ser Gly Asn Phe Cys	140	145 150
Glu Ile Val Ala Ser Pro Cys Gln Asn Gly Gly Thr Cys Leu Gln	155	160 165
His Thr Gln Pro Glu His Arg Ile Leu Lys Val Ser Met Lys Glu	170	175 180
Leu Asn Lys Lys Thr Pro Leu Leu Thr Glu Gly Gln Ala Ile Cys	185	190 195
Phe Thr Ile Leu Gly Val Leu Thr Ser Leu Val Val Leu Gly Thr	200	205 210

WO 00/01821

PCT/US99/15121

Val Gly Ile Val	Phe Leu Asn Lys Cys Glu Thr Trp Val Ser Asn	
	215	220 225
Leu Arg Tyr Asn	His Met Leu Arg Lys Lys Lys Asn Leu Leu Leu	
	230	235 240
Gln Tyr Asn Ser	Gly Glu Asp Leu Ala Val Asn Ile Ile Phe Pro	
	245	250 255
Glu Lys Ile Asp	Met Thr Thr Phe Ser Lys Glu Ala Gly Asp Glu	
	260	265 270
Glu Ile		

<210> 5

<211> 363

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 1739035

<400> 5

Met Cys Leu Asn His Ser Asn Gln Phe Thr Gln Leu Gly Asn Ile	
1	5 10 15
Thr Glu Thr Thr Lys Phe Glu Lys Leu Ala Glu Asp Cys Lys Arg	
	20 25 30
Ser Met Asp Ile Leu Lys Gln Ala Phe Val Arg Gly Leu Pro Thr	
	35 40 45
Pro Thr Ala Arg Phe Glu Gln Arg Thr Phe Ser Val Ile Lys Ile	
	50 55 60
Phe Pro Asp Leu Ser Ser Asn Asp Met Leu Leu Phe Ile Val Lys	
	65 70 75
Gly Ile Asn Leu Pro Thr Pro Pro Gly Leu Ser Pro Gly Asp Leu	
	80 85 90
Asp Val Phe Val Arg Phe Asp Phe Pro Tyr Pro Asn Val Glu Glu	
	95 100 105
Ala Gln Lys Asp Lys Thr Ser Val Ile Lys Asn Thr Asp Ser Pro	
	110 115 120
Glu Phe Lys Glu Gln Phe Lys Leu Cys Ile Asn Arg Ser His Arg	
	125 130 135
Gly Phe Arg Arg Ala Ile Gln Thr Lys Gly Ile Lys Phe Glu Val	
	140 145 150
Val His Lys Gly Gly Leu Phe Lys Thr Asp Arg Val Leu Gly Thr	
	155 160 165
Ala Gln Leu Lys Leu Asp Ala Leu Glu Ile Ala Cys Glu Val Arg	
	170 175 180
Glu Ile Leu Glu Val Leu Asp Gly Arg Arg Pro Thr Gly Gly Arg	
	185 190 195
Leu Glu Val Met Val Arg Ile Arg Glu Pro Leu Thr Ala Gln Gln	
	200 205 210
Leu Glu Thr Thr Thr Glu Arg Trp Leu Val Ile Asp Pro Val Pro	
	215 220 225
Ala Ala Val Pro Thr Gln Val Ala Gly Pro Lys Gly Lys Ala Pro	
	230 235 240
Pro Val Pro Ala Pro Ala Arg Glu Ser Gly Asn Arg Ser Ala Arg	
	245 250 255

WO 00/01821

PCT/US99/15121

```

Pro Leu His Ser Leu Ser Val Leu Ala Phe Asp Gln Glu Arg Leu
      260      265      270
Glu Arg Lys Ile Leu Ala Leu Arg Gln Ala Arg Arg Pro Val Pro
      275      280      285
Pro Glu Val Ala Gln Gln Tyr Gln Asp Ile Met Gln Arg Ser Gln
      290      295      300
Trp Gln Arg Ala Gln Leu Glu Gln Gly Gly Val Gly Ile Arg Arg
      305      310      315
Glu Tyr Ala Ala Gln Leu Glu Arg Gln Leu Gln Phe Tyr Thr Glu
      320      325      330
Ala Ala Arg Arg Leu Gly Asn Asp Gly Ser Arg Asp Ala Ala Lys
      335      340      345
Glu Ala Leu Tyr Arg Arg Asn Leu Val Glu Ser Glu Leu Gln Arg
      350      355      360
Leu Arg Arg

```

<210> 6

<211> 484

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 2799056

<400> 6

```

Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
  1      5      10      15
Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
      20      25      30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
      35      40      45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
      50      55      60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
      65      70      75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
      80      85      90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
      95      100      105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
      110      115      120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
      125      130      135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
      140      145      150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
      155      160      165
Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu Val Asn Ala Leu
      170      175      180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
      185      190      195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly
      200      205      210

```

WO 00/01821

PCT/US99/15121

Met Tyr Ala Asp	Leu Leu Gln Leu Val	Lys Val Pro Ile Ser Leu	
	215	220	225
Ser Ile Asp Arg	Leu Glu Phe Asp Leu	Leu Tyr Pro Ala Ile Lys	
	230	235	240
Gly Asp Thr Ile	Gln Leu Tyr Leu Gly	Ala Lys Leu Leu Asp Ser	
	245	250	255
Gln Gly Lys Val	Thr Lys Trp Phe Asn	Asn Ser Ala Ala Ser Leu	
	260	265	270
Thr Met Pro Thr	Leu Asp Asn Ile Pro	Phe Ser Leu Ile Val Ser	
	275	280	285
Gln Asp Val Val	Lys Ala Ala Val Ala	Ala Val Leu Ser Pro Glu	
	290	295	300
Glu Phe Met Val	Leu Leu Asp Ser Val	Leu Pro Glu Ser Ala His	
	305	310	315
Arg Leu Lys Ser	Ser Ile Gly Leu Ile	Asn Glu Lys Ala Ala Asp	
	320	325	330
Lys Leu Gly Ser	Thr Gln Ile Val Lys	Ile Leu Thr Gln Asp Thr	
	335	340	345
Pro Glu Phe Phe	Ile Asp Gln Gly His	Ala Lys Val Ala Gln Leu	
	350	355	360
Ile Val Leu Glu	Val Phe Pro Ser Ser	Glu Ala Leu Arg Pro Leu	
	365	370	375
Phe Thr Leu Gly	Ile Glu Ala Ser Ser	Glu Ala Gln Phe Tyr Thr	
	380	385	390
Lys Gly Asp Gln	Leu Ile Leu Asn Leu	Asn Asn Ile Ser Ser Asp	
	395	400	405
Arg Ile Gln Leu	Met Asn Ser Gly Ile	Gly Trp Phe Gln Pro Asp	
	410	415	420
Val Leu Lys Asn	Ile Ile Thr Glu Ile	Ile His Ser Ile Leu Leu	
	425	430	435
Pro Asn Gln Asn	Gly Lys Leu Arg Ser	Gly Val Pro Val Ser Leu	
	440	445	450
Val Lys Ala Leu	Gly Phe Glu Ala Ala	Glu Ser Ser Leu Thr Lys	
	455	460	465
Asp Ala Leu Val	Leu Thr Pro Ala Ser	Leu Trp Lys Pro Ser Ser	
	470	475	480
Pro Val Ser Gln			

<210> 7

<211> 1638

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 238506

<400> 7

```

tcggtagatg gtgggctgga ctcaggcttc cacagcgttg atagtggcag caagaggtgg 60
tctggaaatg agtcaacaga tgaattttca gagctgtcat tccggatctc agagctggcc 120
cgggagcccc ggggaccag agaacgcaag gaggatggct cagcggacgg agaccctgtg 180
cagattgact tcatcgacag ccatgtcccc ggggaggatg aagagcgagg cactgtggag 240
gagcagcgac caccgaatt aagccctggg gcaggggaca gggagagggc accaagcagc 300
aggcgggagg agccggcagg ggaggagcgg cggcgcccgg acaccttgca gctgtggcag 360

```

WO 00/01821

PCT/US99/15121

```

gagcgggaac ggcggcagca gcagcagagc ggggcgtggg gggccccgag gaaggatagc 420
ctcttgaagc cagggctcag ggctgttggt ggagggggcg ccgccgtgtc cactcaagcc 480
atgcacaacg gctcgcttaa gtccagtgc tcccaagcag gggctgcagc ggggcaggga 540
gcccccgccc ctgccccctgc ctcccaagag ccccttccca tagctggacc agcgacagca 600
cctgctccac ggccacttgg ctccattcag agaccaaaca gcttcctctt ccgttcctcc 660
tctcagagtg gctcaggccc ttcttcacca gactctgtcc tgagacctcg gcggtacccc 720
caggttccag atgagaagga cttaatgact cagctgcgcc aggtccttga gtcccggtg 780
cagcgcccc tgcctgagga cctggccgag gctctggcca gtgggggtcat cctgtgccag 840
ctggccaacc agctacggcc gcgctccgtg cccctcatcc atgtgccctc ccctgctgtg 900
ccaaaactca gtgcccctcaa ggctcggaag aatgtggaga gttttctaga agcctgtcga 960
aaaatggggg tgcctgaggc tgacctgtgc tgcacctcgg atctcctcca gggcactgcc 1020
cgggggctgc ggaccgcgct ggaggccgtg aagcgggtgg ggggcaaggc cctaccgccc 1080
ctctggcccc cctctggtct gggcggttct gtctcttctt acgtggtcct catgctgtg 1140
ctctatgtca cctacactcg gctcctgggt tctaggccc caaaatcggc cctccctcac 1200
ccctttccct tctctctat ttataaggtc cctgctccac ccgacccac ctgcggtgcc 1260
ttcagcccca accaaagaca ctagtgcacc cccctcacag aactgacct cagaggcccc 1320
actctggtgc cccagaccc tgggccccca gcctctggcc tccctccagt agccccacga 1380
gtccccacct ctcagtgtg acggtgcctt catgtccccg ccggccctgc ccctgccctc 1440
tgtaccccggt gaggggtggc aggagctgga gtctccccct tccctcctgtg cctccccctt 1500
cccccccaa cagctgctat gggggggcta aattatctct attttgtaga gaggatctat 1560
atgtgtaggg gttcggggcc caggccgggt cctatctct gtgtataaac tgtacagacc 1620
gtgaaaagaa aaaaaaaaaa                                     1638

```

<210> 8

<211> 1015

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 414692

<400> 8

```

cgctttctcc gccagctgg aatttttgaa gcgagaaaat cgactcgctc ggtgttcgcc 60
cgccgacgcc gcacggcttg ctggggctgg gctcttctc gcggaagtgg ggaggaggcg 120
gttgcggtta gtggaccggg accggtaggg gtgctgttgc catcatggct gaccccgacc 180
cccggtaccc tcgctcctcg atcgaggacg acttcaacta tggcagcagc gtggcctccg 240
ccaccgtgca catccgaatg gcctttctga gaaaagtcta cagcattctt tctctgcagg 300
ttctcttaac tacagtgact tcaacagttt ttttatactt tgagtctgta cggacatttg 360
tacatgagag tccctgcctta attttgcgtt ttgccctcgg atctctgggt ttgatttttg 420
cgttgacttt aaacagacat aagtatcccc ttaacctgta cctacttttt ggatttacgc 480
tgttggaagc tctgactgtg gcagttgttg ttactttcta tgatgtatat attattctgc 540
aagctttcat actgactact acagtatttt ttggtttgac tgtgtatact ctacaatcta 600
agaaggattt cagcaaattt ggagcagggc tgtttgctct tttgtggata ttgtgcctgt 660
caggattctt gaagtttttt ttttatagtg agataatgga gttggtctta gccgctgcag 720
gagcccttct tttctgtgga ttcatcatct atgacacaca ctactgatg cataaactgt 780
cacctgaaga gtacgtatta gctgccatca gcctctactt ggatatcatc aatctattcc 840
tgcacctgtt acggtttctg gaagcagtta ataaaaagta attaaaagta tctcagctca 900
actgaagaac aacaaaaaaaa atttaacgag aaaaaaggat taaagtaatt ggaagcagta 960
tatagaaact gtttcattaa gtaataaagt ttgaaacaat gattaaaaaa aaaaaa 1015

```

<210> 9

<211> 1481

<212> DNA

<213> Homo sapiens

WO 00/01821

PCT/US99/15121

<220>

<221> misc_feature

<223> Incyte Clone No: 998868

<400> 9

```

gcgggcggtg gagcagcgct ggggttttcgg cctggaggag ttgtacggcc tggcactgcg 60
cttcttcaaa gaaaaagatg gcaaaagcatt tcattccaact tatgaagaaa aattgaagct 120
tgtggcactg cataagcaag ttcttatggg cccatataat ccagacactt gtcctgaggt 180
tggattcttt gatgtgttgg ggaatgacag gaggagagaa tgggcagccc tgggaaacat 240
gtctaaagag gatgccatgg tggagtttgt caagctctta aataggtgtt gccatctctt 300
ttcaacatat gttgcgtccc acaaaataga gaaggaagag caagacaaaa aaaggcagga 360
ggaagaggag cgaaggcggc gtgaagagga agaaagagaa cgtctgccaa aggaggaaga 420
gaaacgtagg agagaagaag aggaaaggct tcgacgggcg gcagaggaaa ggagacggat 480
agaagaagaa aggtctcggt tggagcagca aaagcagcag ataatggcag ctttaaactc 540
ccagactgcc gtgcagttcc agcagtatgc agcccaacag tatccaggga actacgaaca 600
gcagcaaatt ctcatccgcc agttgcagga gcaacactat cagcagtaca tgcagcagtt 660
gtatcaagtc cagcttgcac agcaacaggc agcattacag aaacaacagg aagtagtagt 720
ggctgggtct tccttgccca catcatcaaa agtgaatgca actgtacca gtaatatgat 780
gtcagttaat ggacaggcca aaacacacac tgacagctcc gaaaaagaac tgggaaccaga 840
agctgcagaa gaagccctgg agaattggacc aaaagaatct cttccagtaa tagcagctcc 900
atccatgtgg acacgacctc agatcaaaga cttcaaagag aagattcagc aggatgcaga 960
ttccgtgatt acagtggggc gaggagaagt ggtcactggt cgagtaccca cccatgaaga 1020
aggatcatat ctcttttggg aatttgccac agacaattat gacattgggt ttggggtgta 1080
ttttgaatgg acagactctc caaacactgc tgtcagcgtg catgtcagtg agtccagcga 1140
tgacgacgag gaggaagaag aaaacatcgg ttgtgaagag aaagccaaaa agaattgcaa 1200
caagcctttg ctggatgaga ttgtgcctgt gtaccgacgg gactgtcatg aggaggtgta 1260
tgctggcagc catcaatc cagggagagg agtctatctc ctcaagtttg acaactccta 1320
ctctttgtgg cggtcaaaat cagtctacta cagagtctat tatactagat aaaaatgttg 1380
ttacaaagtc tggagtctag ggttgggcag aagatgacat ttaatttgga gatttctttt 1440
tacttttgtg gagcattaga gtcacagttt accttattga t 1481

```

<210> 10

<211> 1212

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 1296451

<400> 10

```

cgcgacgcg cagcccggtg cagccctggc tttccctcg ctgcgcgcc gcgccccctt 60
tcgcgtccgc aaccagaagc ccagtgcggc gccaggagcc ggacccgcgc ccgcaccgct 120
ccggggaccg cgaccccggc cgcccagaga tgaccgcgac cgaagccctc ctgcgcgtcc 180
tcttgctcct gctggctttc ggccacagca cctatggggc tgaatgcttc ccggcctgca 240
acccccaaaa tggattctgc gaggatgaca atgtttgcag gtgccagcct ggctggcagg 300
gtcccccttg tgaccagtgc gtgacctctc ccggctgcct tcacggactc tgtggagaac 360
ccgggcagtg catttgcacc gacggctggg acggggagct ctgtgataga gatgttcggg 420
cctgctcctc ggccccctgt gccacaacg ggtactcggg aaaggactgc cagaaaaagg 480
acgggcccctg tgtgatcaac ggctccccct gccagcacgg aggcacctgc gtggatgatg 540
agggccgggc ctcccatgcc tctgcctgt gcccccttg cttctcaggc aatttctgcg 600
agatcgtggc cagcccgtgc cagaacgggg gcacctgcct gcagcacacc cagccggagc 660
accgcatcct gaagggtgtc atgaaagagc tcaacaagaa aacccctctc ctcaccgagg 720
gccaggccat ctgcttcacc atcctggggc tgctcaccag cctgggtggg ctgggactg 780
tgggtatcgt ctctctcaac aagtgcgaga cctgggtgtc caacctgcgc tacaaccaca 840
tgctgcggaa gaagaagaac ctgctgcttc agtacaacag cggggaggac ctggccgtca 900

```

WO 00/01821

PCT/US99/15121

```

acatcatctt ccccgagaag atcgacatga ccaccttcag caaggaggcc ggcgacgagg 960
agatctaagc agcgttccca cagccccctc tagattcttg gagttccgca gagcttacta 1020
tacgcggtct gtccctaattc ttgtggtggt cgctatctct tgtgtcaaag ctggtgaacg 1080
ctacgcttac atatatgtgc tttgtgctgc tgtgtgacaa acgcaatgca aaaacaatcc 1140
tctttctctc tcttaatgca tgatacagaa taataataag aatttcatct ttaaagaga 1200
tctggaattt ta 1212

```

<210> 11

<211> 1658

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 1739035

<400> 11

```

tggccccgggt ctgtctcagg aggccgcccc gcgctatggt gaactcacca agctcatacg 60
gcagcagcac gagatgtgcc tgaaccactc aaaccaattc acccagctgg gcaacatcac 120
tgaaaccacc aagtttgaag agttggcgga ggactgtaag cggagcatgg acattctgaa 180
gcaagccttc gtccgggggtc tccccacgcc caccgccccg tttgagcaaa ggaccttcag 240
cgtcatcaag atcttccctg acctcagcag caacgacatg ctctcttca tcgtgaaggg 300
catcaacttg cccacacccc caggactgtc ccctggcgat ctggatgtct ttgttcggtt 360
tgacttcccc tatcccaacg tggagaagac aagaccagtg tgatcaagaa 420
cacagactcc cctgagttca aggagcagtt caaactctgc atcaaccgca gccaccgtgg 480
cttccgaagg gccatccaga ccaagggcag caagttcgaa gtggttcaca aggggggggt 540
gttcaagact gaccgggtgc tggggacagc ccagctgaag ctggatgcac tggagatagc 600
atgtgaggtc cgggagatcc ttgaggtcct ggatggctgc cggcccacag gggggcgact 660
ggaggtaatg gtccggatcc gggagccact gacagcccag cagttggaga cgacgacaga 720
gaggtggctg gtcattgacc ctgtgccggc agctgtgccc acacagggtg ctgggcccac 780
aggggaaggcc cctcctgtgc ctgcccctgc aaggaggatc ggggaacagat cagcccggcc 840
cctgcatagc ctcatgtgtc tggcgtttga ccaagagcgt ctggagcgga agatcctggc 900
cctcaggcag gcgcggcggc cggtgccccc agaagtggcc cagcagtacc aggacatcat 960
gcaacgcagc cagtggcaga gggcacagct ggagcagggg ggtgtgggca tccgacggga 1020
atacgcagcc cagctggagc ggcagctgca gttctacacg gaggtgccc ggcgcctggg 1080
caacgatggc agcagggatg ctgcaaagga ggcgctctat aggcggaatc tggtagagag 1140
tgagctgcag cggctccgca ggtgaggagc ccatggggcg ggcagcccc agaaagcggg 1200
cagcaggccc cgataaccgg aagagccgac acagccacga accagacaag cagacaatca 1260
gcggacaate ggttctggac tcaccctca tccgggcccc cagccccgcc agagcctccg 1320
tggtgcggg tggtgggaac catgcctgc agccagtatg tgcccctcac ccaggcctgg 1380
ctgggcccctg gagagtcctg tttgcacagc ccagggggtg cgggcctctg gcccgccccg 1440
gagcagggag ggtggctggg gccaaagccc gagggccct gcaagcactt tacttctgt 1500
tcttccccag ccttaacccc aaagccctcc tgcaccccaa agaagccact gaggtggcc 1560
gagccacact gtctccccag gggcgtcgac ctggcccagc tgggtcccca gggccagcac 1620
atggaataaa atagccaggg ccacactcaa aaaaaaaaa 1658

```

<210> 12

<211> 1707

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte Clone No: 2799056

WO 00/01821

PCT/US99/15121

<400> 12

```

gggtgtgcagg atataagggtt ggacttccag acccactgcc cgggagagga gaggagcggg 60
ccgaggactc cagcgtgccc aggtctggca tcttgcactt gctgccctct gacacctggg 120
aagatggccg gcccgtggac cttcaccctt ctctgtggtt tgctggcagc caccttgatc 180
caagccaccc tcagtcccac tgcagttctc atcctcggcc caaaagtcac caaagaaaag 240
ctgacacagg agctgaagga ccacaacgcc accagcatcc tgagcagct gccgctgtc 300
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct ggtgaacacc 360
gtcctgaagc acatcatctg gctgaaggtc atcacagcta acatcctcca gctgcagggtg 420
aagccctcgg ccaatgacca ggagctgcta gtcaagatcc ccctggacat ggtggctgga 480
ttcaacacgc ccctggtcaa gaccatcgtg gagttccaca tgacgactga ggcccaagcc 540
accatccgca tggacaccag tgcaagtggc cccacccgcc tggtcctcag tgactgtgcc 600
accagccatg ggagcctgcg catccaactg ctgcataagc tctccttctt ggtgaacgcc 660
ttagctaagc aggtcatgaa cctcctagtg ccatccctgc ccaatctagt gaaaaaccag 720
ctgtgtcccg tgatcgaggc ttccttcaat ggcattgtatg cagacctcct gcagctggtg 780
aaggtgcca tttccctcag cattgaccgt ctggagtttg accttctgta tctgccaac 840
aagggtgaca ccattcagct ctacctggg gccaagtgtg tggactcaca gggaaagggtg 900
accaagtggg tcaataactc tgcagcttcc ctgacaatgc ccacctgga caacatcccg 960
ttcagcctca tcgtgagtca ggacgtgggt aaagctgcag tggctgctgt gctctctcca 1020
gaagaattca tggctcctgtt ggactctgtg cttcctgaga gtgcccatcg gctgaagtca 1080
agcatcgggc tgatcaatga aaaggctgca gataagctgg gatctacca gatcgtgaag 1140
atcctaactc aggacactcc cgagtttttt atagaccaag gccatgcca ggtggcccaa 1200
ctgatcgtgc tggaaagtgtt tccctccagt gaagccctcc gccctttgtt caccctgggc 1260
atcgaagcca gctcgggaagc tcagttttac accaaagggtg accaacttat actcaacttg 1320
aataacatca gctctgatcg gatccagctg atgaactctg ggattggctg gttccaacct 1380
gatgttctga aaaacatcat cactgagatc atccactcca tctgctgcc gaaccagaat 1440
ggcaaattaa gatctggggg cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1500
gagtcctcac tgaccaagga tgcccttgtg cttactccag cctccttgtg gaaaccagc 1560
tctcctgtct cccagtgaag acttggatgg cagccatcag ggaaggctgg gtcccagttg 1620
ggagtatggg tgtgagctct atagaccatc cctctctgca atcaataaac acttgctgt 1680
gaaaaaaaaa aaaaaataaa aaaaaaa 1707

```